## STRUCTURE SEARCH
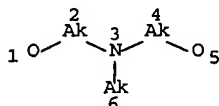
```
=> d his 134

      (FILE 'HCAPLUS' ENTERED AT 11:33:22 ON 10 JAN 2008)
L34           1 S L33 AND L21


=> d que 134
L6               STR
```
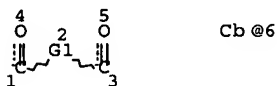


```
NODE ATTRIBUTES:
CONNECT IS E2  RC AT    2
CONNECT IS E2  RC AT    4
CONNECT IS E1  RC AT    6
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED
ECOUNT  IS M1-X6 C  AT    2
ECOUNT  IS M1-X6 C  AT    4
ECOUNT  IS M1-X6 C  AT    6

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS   6

STEREO ATTRIBUTES: NONE
L7  (    207481)SEA FILE=REGISTRY ABB=ON   PLU=ON   POLYESTER/PCT
L8  (     45557)SEA FILE=REGISTRY ABB=ON   PLU=ON   POLYAMINE/PCT
L9  (     10853)SEA FILE=REGISTRY ABB=ON   PLU=ON   L7 AND L8
L10 (      1002)SEA FILE=REGISTRY SUB=L9 SSS FUL L6
L11              STR
```



```
VAR G1=AK/6
NODE ATTRIBUTES:
CONNECT IS E3  RC AT    1
CONNECT IS E3  RC AT    3
CONNECT IS E1  RC AT    5
DEFAULT MLEVEL IS ATOM
GGCAT   IS UNS  AT    6
DEFAULT ECLEVEL IS LIMITED
ECOUNT  IS M6-X12 C  AT    6

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS   6

STEREO ATTRIBUTES: NONE
L12        733 SEA FILE=REGISTRY SUB=L10 SSS FUL L11
L15     294825 SEA FILE=REGISTRY ABB=ON   PLU=ON   POLYETHER/PCT
L16        193 SEA FILE=REGISTRY ABB=ON   PLU=ON   L12 AND L15
L17         97 SEA FILE=HCAPLUS ABB=ON   PLU=ON   L16
L18      25314 SEA FILE=HCAPLUS ABB=ON   PLU=ON   (T OR TERT?)(A)AMINE
L19         16 SEA FILE=HCAPLUS ABB=ON   PLU=ON   L17 AND L18
```

Page 1

```
L21              QUE   ABB=ON   PLU=ON   COSMET?/SC,SX
L22          1 SEA FILE=HCAPLUS ABB=ON   PLU=ON   L19 AND L21
L23         19 SEA FILE=HCAPLUS ABB=ON   PLU=ON   POLYESTERAMIN?
L25     218238 SEA FILE=HCAPLUS ABB=ON   PLU=ON   POLYESTER+PFT,OLD,NT/C
               T
L26      44629 SEA FILE=HCAPLUS ABB=ON   PLU=ON   POLYAMINES+PFT,OLD,NT/
               CT
L28        787 SEA FILE=HCAPLUS ABB=ON   PLU=ON   L25(L)POLYAMINE
L29       1030 SEA FILE=HCAPLUS ABB=ON   PLU=ON   L26(L)POLYESTER
L30         15 SEA FILE=HCAPLUS ABB=ON   PLU=ON   L17 AND (L28 OR L29
               OR L23)
L31          3 SEA FILE=HCAPLUS ABB=ON   PLU=ON   L18 AND L30
L32          2 SEA FILE=HCAPLUS ABB=ON   PLU=ON   L31 AND (ETHER? OR
               POLYETHER? OR GLYCOL?)
L33          4 SEA FILE=HCAPLUS ABB=ON   PLU=ON   L22 OR L31 OR L32
L34          1 SEA FILE=HCAPLUS ABB=ON   PLU=ON   L33 AND L21
```

## STRUCTURE SEARCH RESULT

```
=> d 134 1 ibib ed ab hitstr hitind
```

L34   ANSWER 1 OF 1   HCAPLUS   COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:        1998:642110  HCAPLUS  Full-text
DOCUMENT NUMBER:         129:320938
TITLE:                   Hair preparations containing polyurethanes or
                         polyureas
INVENTOR(S):             Ota, Atsushi; Tomioka, Masaya; Taka,
                         Tatsuhito; Miura, Shuji
PATENT ASSIGNEE(S):      Sanyo Chemical Industries Ltd., Japan; Kanebo
                         Cosmetics, Ltd.
SOURCE:                  Jpn. Kokai Tokkyo Koho, 11 pp.
                         CODEN: JKXXAF
DOCUMENT TYPE:           Patent
LANGUAGE:                Japanese
FAMILY ACC. NUM. COUNT:  1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|------|-----------------|------|
| JP 10259115 | A | 19980929 | JP 1998-13213 | 1998 0107 |
| JP 3667518 | B2 | 20050706 | | |

PRIORITY APPLN. INFO.:                       JP 1997-17501      A
                                                               1997
                                                               0114

OTHER SOURCE(S):         MARPAT 129:320938
ED    Entered STN:  12 Oct 1998
AB    A hair-setting agent which provides a natural look under high humidity and high
      temperature conditions, comprises polyurethanes or polyureas containing tertiary amines
      and/or quaternary ammonium at 0.01-3 meq/g.  Adipic acid-1,4-butanediol-N-
      methyldiethanolamine-isophorone diisocyanate copolymer salt with di-Me sulfate
      (quaternary ammonium content 0.4 meq/g) was prepared and tested for hair-setting
      properties.
IT    214774-68-2P
      RL: BUU (Biological use, unclassified); IMF (Industrial
      manufacture); BIOL (Biological study); PREP (Preparation); USES
      (Uses)
         (hair-setting prepns. containing polyurethanes)
RN    214774-68-2  HCAPLUS
CN    Hexanedioic acid, polymer with 1,4-butanediol,
      α-hydro-ω-hydroxypoly(oxy-1,4-butanediyl),
      5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane,
      2,2'-(methylimino)bis[ethanol] and 3-methyl-1,5-pentanediol,
      block, compd. with sodium chloroacetate (9CI)   (CA INDEX NAME)

      CM    1

      CRN   3926-62-3
      CMF   C2 H3 Cl O2 . Na


                O
                ‖
      HO—C—CH2—Cl
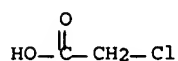

      ● Na

CM   2

CRN   214774-67-1
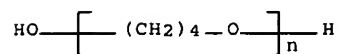CMF   (C12 H18 N2 O2 . C6 H14 O2 . C6 H10 O4 . C5 H13 N O2 . C4 H10
O2 . (C4 H8 O)n H2 O)x
CCI   PMS

CM   3

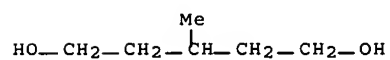CRN   25190-06-1
CMF   (C4 H8 O)n H2 O
CCI   PMS

$$\text{HO} - \left[ (CH_2)_4 - O \right]_n - H$$

CM   4

CRN   4457-71-0
CMF   C6 H14 O2

$$\text{HO} - CH_2 - CH_2 - \underset{\underset{}{\overset{\overset{Me}{|}}{CH}}}{} - CH_2 - CH_2 - OH$$

CM   5

CRN   4098-71-9
CMF   C12 H18 N2 O2
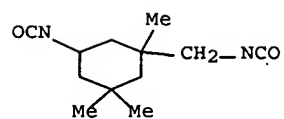
CM   6

CRN   124-04-9
CMF   C6 H10 O4

$$HO_2C - (CH_2)_4 - CO_2H$$

CM   7
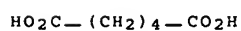
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CRN   110-63-4
CMF   C4 H10 O2
```

HO—(CH₂)₄—OH

$$HO-(CH_2)_4-OH$$

```
CM    8

CRN   105-59-9
CMF   C5 H13 N O2
```

$$HO-CH_2-CH_2-\overset{\overset{\displaystyle Me}{|}}{N}-CH_2-CH_2-OH$$

```
IC    ICM  A61K007-06
      ICS  C08G018-32; C08G018-38
CC    62-3 (Essential Oils and Cosmetics)
IT    214774-65-9P 214774-68-2P   214774-69-3P   214774-70-6P
      214774-71-7P   214774-72-8P   214774-73-9P   214774-74-0P
      RL: BUU (Biological use, unclassified); IMF (Industrial
      manufacture); BIOL (Biological study); PREP (Preparation); USES
      (Uses)
         (hair-setting prepns. containing polyurethanes)
```

## FULL SEARCH HISTORY

```
=> d his nofile

        (FILE 'HOME' ENTERED AT 11:20:28 ON 10 JAN 2008)

        FILE 'REGISTRY' ENTERED AT 11:21:04 ON 10 JAN 2008
                   D SAV
                   ACT RAE306REG/A
                   ---------
L1                 STR
L2    (   207481) SEA ABB=ON  PLU=ON  POLYESTER/PCT
L3    (    45557) SEA ABB=ON  PLU=ON  POLYAMINE/PCT
L4    (    10853) SEA ABB=ON  PLU=ON  L2 AND L3
L5         1002 SEA SUB=L4 SSS FUL L1
                   ---------
                   D QUE STAT
                   D SAV
                   ACT RAE306REGA/A
                   ---------
L6                 STR
L7    (   207481) SEA ABB=ON  PLU=ON  POLYESTER/PCT
L8    (    45557) SEA ABB=ON  PLU=ON  POLYAMINE/PCT
L9    (    10853) SEA ABB=ON  PLU=ON  L7 AND L8
L10   (     1002) SEA SUB=L9 SSS FUL L6
L11                STR
L12          733 SEA SUB=L10 SSS FUL L11
                   ---------
                   D QUE STAT


        FILE 'LREGISTRY' ENTERED AT 11:29:59 ON 10 JAN 2008
L13                STR


        FILE 'REGISTRY' ENTERED AT 11:31:38 ON 10 JAN 2008
L14            0 SEA SUB=L12 SSS SAM L13
                   E POLYETHER/PCT
L15       294825 SEA ABB=ON  PLU=ON  POLYETHER/PCT
L16          193 SEA ABB=ON  PLU=ON  L12 AND L15


        FILE 'HCAPLUS' ENTERED AT 11:33:22 ON 10 JAN 2008
L17           97 SEA ABB=ON  PLU=ON  L16
L18        25314 SEA ABB=ON  PLU=ON  (T OR TERT?)(A)AMINE
L19           16 SEA ABB=ON  PLU=ON  L17 AND L18
                   D SCAN
                   D L19 1-16 TI CC
L20            0 SEA ABB=ON  PLU=ON  L19 AND COSMETIC
L21              QUE ABB=ON  PLU=ON  COSMET?/SC,SX
L22            1 SEA ABB=ON  PLU=ON  L19 AND L21
                   D SCAN
                   D HITSTR
                   D PY
L23           19 SEA ABB=ON  PLU=ON  POLYESTERAMIN?
L24            2 SEA ABB=ON  PLU=ON  L23 AND L21
                   D 1-2 KWIC
                   D 1-2 TI CC
L25       218238 SEA ABB=ON  PLU=ON  POLYESTER+PFT,OLD,NT/CT
L26        44629 SEA ABB=ON  PLU=ON  POLYAMINES+PFT,OLD,NT/CT
L27            0 SEA ABB=ON  PLU=ON  L25(L)L26
L28          787 SEA ABB=ON  PLU=ON  L25(L)POLYAMINE
L29         1030 SEA ABB=ON  PLU=ON  L26(L)POLYESTER
L30           15 SEA ABB=ON  PLU=ON  L17 AND (L28 OR L29 OR L23)
                   D 1-5 KWIC
L31            3 SEA ABB=ON  PLU=ON  L18 AND L30
                   D 1-3 KWIC
L32            2 SEA ABB=ON  PLU=ON  L31 AND (ETHER? OR POLYETHER? OR
                   GLYCOL?)
```

```
              D 1-2 PY
              D 1-2 AU
L33          4 SEA ABB=ON   PLU=ON   L22 OR L31 OR L32
              D SCAN
L34          1 SEA ABB=ON   PLU=ON   L33 AND L21
              D SCAN
              D AU
              D QUE L34
              D L34 1 IBIB ED AB HITSTR HITIND
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